



# California Regional Water Quality Control Board

## San Diego Region

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**TO:** Barbara L. Evoy  
Division Chief  
Division of Financial Assistance  
State Water Resources Control Board

In reply refer to:  
**PLRP:77-0120.02:OTBRE**

**FROM:** John Robertus  
Executive Officer  
**SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD**

**DATE:** August 26, 2003

**SUBJECT: REQUEST FOR DISBURSEMENT OF FUNDS FROM THE STATE  
WATER POLLUTION CLEANUP AND ABATEMENT ACCOUNT**

The purpose of this memo is to request \$260,000 in funding from the State Cleanup and Abatement Account for technical work on source analysis and developing cleanup levels for Chollas Creek, which empties into San Diego Bay. The funding would enable the Southern California Coastal Water Research Project (SCCWRP) to perform site monitoring, atmospheric deposition analysis, modeling, and development of cleanup levels for Chollas Creek and San Diego Bay.

The Regional Board has an excellent track record of assessing sites, identifying Responsible Parties, issuing Cleanup and Abatement Orders, and cleaning up contaminated sites. Figure 1 illustrates the history of successful cleanup projects in San Diego Bay and where this project fits into the time line.

The following information addresses the Funding Criteria, as described in Chapter 4.4 of the Administrative Procedures Manual.

### **1. Agency name and address**

The California Regional Water Quality Control Board, San Diego Region (Regional Board) is the agency requesting the funds. The Regional Board is located at 9174 Sky Park Court, Suite 100, San Diego CA, 92123.

### **2. The agency's authority to cleanup a waste**

The Regional Board designates cleanup levels for contaminated bay sediment sites in accordance with the State Water Resources Control Board Resolution No. 92-49, Policies

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And Procedures For Investigation And Cleanup And Abatement Of Discharges Under Water Code Section 13304. Resolution No. 92-49 is a state policy that establishes policies and procedures for investigation and cleanup and abatement under Water Code Section 13304. The Resolution establishes the basis for determining cleanup levels of waters of the State and sediments that impact waters of the State.

Resolution No. 92-49 provides that the discharger(s) are required to cleanup and abate the effects of discharges..... “in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored...”. Alternative cleanup levels less stringent than background must, among other things, not unreasonably affect present and anticipated beneficial uses of waters of the State. The Resolution also includes procedures to investigate the nature and horizontal and vertical extent of a discharge and procedures to determine appropriate cleanup and abatement measures.

### 3. The waste discharged or potentially discharged

Chollas Creek and the Mouth of Chollas Creek are both on the 2002 CWA Section 303(d) List of Impaired Waters. The State of California and the Regional Board has designated the Mouth of Chollas Creek a Toxic Hot Spot, pursuant to Water Code Section 13392.

Site	Type of Discharge	Waste Types	Water Body Affected
Chollas Creek	Storm water and urban runoff	Sediment and dissolve phase metals, organics, pesticides	Chollas Creek
Mouth of Chollas Creek	Storm water runoff, urban runoff, and historical industrial discharges	Marine sediment pesticides, metals, organics	San Diego Bay

### 4. The location of the discharge and the impact on groundwater or surface water

Site	Location	Impact on Surface Water
Chollas Creek	San Diego County, Pueblo San Diego HU	Toxicity, bioaccumulation and/or biomagnification of pollutants
Mouth of Chollas Creek	Mid San Diego Bay, between NASSCO and NAVSTA	Toxicity, bioaccumulation and/or biomagnification of pollutants



## **5. The threat to water quality and public health posed by the discharge**

The mouth of Chollas Creek has sediment toxicity and degraded benthic community, and Chollas Creek has elevated dissolved metals concentrations that impact beneficial uses designated by the Basin Plan for Chollas Creek and San Diego Bay. Both sites are on the 2002 CWA Section 303(d) List of Impaired Waters. The contamination has the potential to be transferred to human receptors. Bay bottom sediment contamination at the mouth of Chollas Creek poses a public health threat primarily from the potential for contaminants to bioaccumulate and biomagnify (i.e., through movement along the food chain to aquatic organisms that may be consumed by humans).

The potential threat to human health from contaminated sediments is through three principal pathways of exposure. The primary pathway, and by far the most significant, is human consumption of fish and shellfish contaminated by chemicals in the sediment through the processes of bioaccumulation and biomagnification. In addition to ingestion of organisms that have bioaccumulation of a pollutant, two other pathways of exposure to contaminated sediments are:

1. Direct contact with contaminated sediments by swimmers or divers
2. Incidental ingestion of contaminated sediment or associated water by swimmers or divers

## **6. The agency's available resources to perform the cleanup**

The cleanup and remediation of contaminated marine sediment in San Diego Bay began in 1985 with the PACO Terminal copper cleanup and the Teledyne Ryan (Convair Lagoon) PCB cap. Since that time the Regional Board has issued ten Cleanup and Abatement Orders (CAO) for San Diego Bay and has obtained satisfactory cleanup at nine of these sites to date. Cleanup is pending at the remaining site, with a sediment cap scheduled for construction in 2004. The Regional Board is currently in Phase IV of its cleanup of San Diego Bay, which includes addressing the mouth of Chollas Creek (see Figure 1). The Regional Board does not have any available contract funds for the work described in this memo.

## **7. Efforts made to secure alternative funding**

The Regional Board is working with the City of San Diego to obtain their financial participation. It is anticipated that the City of San Diego will contribute by performing sampling, laboratory analyses, and potentially provide additional funding towards the project.

In addition, the US Navy is currently funding a joint study with the Regional Board to perform site assessment at the mouth of Chollas Creek for cleanup. The Regional Board is



also using Total Maximum Daily Load (TMDL) contract funds for this work that also involves the Southern California Coastal Water Research Project (SCCWRP).

**8. Impact on the community or surrounding area if the project is not approved for funding from the CAA**

Delays in cleaning up Chollas Creek allow for continuing exposure and health concerns due to contact and fish consumption. The contamination threatens the environment and the health of the residents in the surrounding communities, who eat the fish from the Bay. Sediment contamination at the mouth of Chollas Creek in the San Diego Bay poses a threat to wildlife and the public health from exposure to pollutants through the food chain attributable to the contaminated sediment.

Significant delays in the cleanup of Chollas Creek and San Diego Bay will result if additional funding is not secured. The site assessment and source analysis of Chollas Creek will also be severely lacking in site-specific data. If additional funds are not secured, the resulting TMDLs and cleanup will be forced to rely heavily upon numerous assumptions and non-site specific data. Both of which will vastly increase the uncertainty in the modeling analysis and development of site specific cleanup levels, insufficiently identify Responsible Parties, and ultimately result in no assurance that the beneficial uses for Chollas Creek and San Diego Bay will be protected.

**9. The entity or individual responsible for the discharge of the waste**

Since the sources of the contamination are various non-point and possibly historical point sources, there are a number of potential Responsible Parties, which include the US Navy, City of San Diego, City of Lemon Grove, City of La Mesa, County of San Diego, and the California Department of Transportation (CALTRANS). Additional Responsible Parties may be determined through the site assessment and source analysis portions of the study. Some pollutants (i.e. chlordane and PCBs) have been banned for several years and responsible parties may not be identified.

**10. Opportunity to recover the cost of cleanup**

The Regional Board will work to recover the costs from the potential Responsible Parties that include the US Navy, City of San Diego, City of Lemon Grove, City of La Mesa, County of San Diego, and CALTRANS. The source analysis will assist in identifying Responsible Parties. The Responsible Parties will be compelled to enter into a cost recovery agreement with the Regional Board.



**11. Efforts the agency will make to recover the costs from the responsible party**

At the appropriate time the Regional Board will issue cost recovery letters to the Responsible Parties named in the CAO's requesting their participation in the cleanup and to recover the costs of the cleanup.

**12. The steps the agency will take in conducting the cleanup or abatement (attach a work plan that provides enough detail to explain the project's course, including costs for each phase)**

The remediation of San Diego Bay began in 1985 with the PACO Terminal copper cleanup and Teledyne Ryan (Convair Lagoon) PCB cap. The Regional Board is currently in Phase IV of its cleanup of San Diego Bay, which includes the assessment of the mouth of Chollas Creek (see Figure 1).

Sediment quality assessment is an integral component of the cleanup and abatement process and provides the basis for determination of cleanup levels. The cleanup and abatement methods being considered for the mouth of Chollas Creek include:

Dredging – Cleanup to background levels

Dredging – Cleanup to levels needed to protect beneficial uses

<b>Task</b>	<b>Cost</b>
<u>Task 1. Historical Data</u> Collate and evaluate historical physical, hydrological, and water quality data in the Chollas Creek watershed	\$15,000
<u>Task 2. Data Collection</u> Data collection of Chollas Creek water quality and atmospheric deposition of trace metals	\$155,000
<u>Task 3. Modeling</u> Configuration, calibration, and validation of a dynamic water quality model for the Chollas Creek watershed	\$50,000
<u>Task 4. Reporting</u> Draft and final report	\$30,000
<b>TOTAL</b>	<b>\$260,000</b>

See the attached proposed draft SCCWRP Work Plan for Chollas Creek for more detail.

**13. Evidence the local Regional Water Quality Control Board has issued a Cleanup and Abatement Order regarding the site**

In the cleanup cases cited above, the Responsible Parties are in various stages of working with the Regional Board to perform the necessary site assessment work to determine cleanup



levels and mitigation measures. A CAO will be issued once the site is fully assessed and all the Responsible Parties are identified.

**14. Regional Water Quality Control Board participation in this request (attach a copy of the Regional Board's resolution of support)**

The Regional Board's resolution of support is being considered at the September 10, 2003 Board Meeting. The adopted Resolution will be forwarded to you after this date.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions regarding this request please contact Mr. Brennan Ott of my staff at (858) 268-5362 or Mr. Craig Carlisle of my staff at (858) 637-7119.

JHR:dtb:clc

Enclosures: (2) Work Plan

Figure1: San Diego Bay Cleanup Time Line

